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| Identifier: <b>QP-8.1</b>                   | Revision: <b>1</b> |  |
| Effective Date: <b>10/01/2004</b>           |                    |  |
| Document Catalog Number: <b>ER2004-0047</b> |                    |  |
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**Risk Reduction and Environmental Stewardship  
Remediation Services Project  
Environmental Characterization and Remediation Group**

**Quality Procedure**

for **Inspection and Acceptance  
Testing**

☒ **NES Approved**

|  |  |
|--|--|
| Responsible Division Leader:<br>Doug Stavert | Signature & Date  12/14/05 |
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## Revision Log

| Revision No. | Effective Date | Prepared By        | Description of Changes                          | Affected Pages |
|--------------|----------------|--------------------|---|----------------|
| R0           | 07/17/01       | Andrew E. Gallegos | New Document                                    | All            |
| R1           | 10/01/2004     | Andrew E. Gallegos | Revised in accordance with QP-4.1 requirements. | All            |
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## QP-8.1, R1, Inspection and Acceptance Testing

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### List of Acronyms and Abbreviations

|      |   |
|------|---|
| ECR  | Environmental Characterization and Remediation    |
| LANL | Los Alamos National Laboratory                    |
| LIR  | Laboratory Implementation Requirement             |
| M&TE | measurement and test equipment                    |
| QA   | quality assurance                                 |
| QC   | quality control                                   |
| QP   | quality procedure                                 |
| QPPL | Quality Program project leader                    |
| RPF  | Records Processing Facility                       |
| RRES | Risk Reduction and Environmental Stewardship      |
| RS   | Remediation Services                              |
| UTR  | University of California technical representative |

## QP-8.1, R1, Inspection and Acceptance Testing

### 1.0 PURPOSE

This quality procedure (QP) states the responsibilities and describes the process for preparing for, performing, documenting, and approving inspection and acceptance testing to ensure the quality of items and services purchased for the Los Alamos National Laboratory (LANL), Risk Reduction and Environmental Stewardship, Remediation Services (RRES-RS) Project/Environmental Characterization and Remediation (ECR) Group.

### 2.0 SCOPE

- 2.1 All **RRES-RS/(ECR) participants** shall implement this mandatory QP when preparing for, performing, documenting, and approving inspection and acceptance testing to ensure that items and services purchased for the RRES-RS Project meet technical and performance specifications; expectations for form, fit, function, and performance; and quality assurance/quality control (QA/QC) requirements.

### 3.0 TRAINING

- 3.1 **RRES-RS/ECR participants** shall train to (e.g., by reading and/or classroom training) to and use the current version of this QP; contact the author of this QP if the text is unclear.
- 3.2 **RRES-RS/ECR participants** using this QP shall document training in accordance with QP-2.2, Personnel Training.
- 3.3 The responsible **project leader** shall monitor the proper implementation of this procedure.
- 3.4 The responsible **team leader** shall ensure that the appropriate personnel complete all applicable training assignments.
- 3.5 **RRES-RS/ECR participants** may request assistance with implementation of this procedure from the RRES-ECR Quality Integration and Improvement team.

### 4.0 DEFINITIONS

- 4.1 *Acceptance criteria* — The characteristics of an item or service that design documents, codes, standards, or other requirement documents define for use in determining acceptability.

- 4.2 *Design agent* — The engineer of record who directs and supervises the performance of design work. The engineer of record may be an individual or organization.
- 4.3 *Hold point* — A mandatory inspection point, identified for a specific work activity and stated as a requirement in a design document. Work activities specified as having hold points stop at the hold point and do not resume until the responsible design agent has conducted the required inspection, documented the inspection results, and approved the work activity to proceed. RRES-RS/ECR Quality integration and improvement team members, health and safety personnel, and other qualified participants may perform hold point inspection activities.
- 4.4 *Inspection* — An examination, observation, or measurement to determine the conformance of an item, process, or activity to predetermined requirements.
- 4.5 *Inspector* — An individual (e.g., subcontractor and/or RRES-RS/ECR participant) who meets the RRES-RS Project training and qualification requirements for conducting and documenting and reporting the results of inspection and acceptance testing of items and services purchased for the RRES-RS Project. QP-8.3, Qualification and Certification of Inspection and Acceptance Test Personnel, applies to this definition.
- 4.6 *Nonconformance* — A deficiency in characteristic, documentation, or procedure that renders the quality of an item or service unacceptable or indeterminate.
- 4.7 *Quality assurance* — Quality assurance comprises all plans and systematic actions necessary to provide adequate confidence that an item will perform satisfactorily in service.
- 4.8 *Quality control* — Quality control comprises those quality assurance actions related to the physical characteristics of an item that provide a means to control the quality of the item to predetermined requirements.
- 4.9 *Item* — An all-inclusive term used in place of any of the following: appurtenance, assembly, component, equipment, material, module, part, structure, subassembly, subsystem, system, unit, data, or support systems.
- 4.10 *RRES-RS/ECR participant* — An inclusive term for any University of California/staff augmentation employee, deployed worker, or subcontractor, inclusive of project leaders, team leaders, and project personnel, who participates in activities conducted as part of or on behalf of RRES-RS/ECR.

- 4.11 *Service* — An activity that directly engages the time and effort of a subcontractor to perform an identifiable task rather than to furnish an end item.
- 4.12 *Suspect/counterfeit items*—Material, parts, components (e.g., electrical components, mechanical equipment, lifting materials, fasteners etc.) found to be bogus, unapproved, misrepresented, altered, used-sold-as-new, and/or containing trademark infringements.
- 4.13 *Testing* — A verification process used to assess the capability of an item to conform to specified requirements by subjecting the item to the physical, chemical, environmental, and/or operational parameters of intended performance.
- 4.14 *Verification* — The act of reviewing, inspecting, testing, checking, auditing, or otherwise determining and documenting whether items, processes, services, or documents conform to specified requirements.
- 4.15 *Witness point*— A mandatory inspection point identified for a specific work activity and stated as a requirement in design documents. RRES-RS/ECR participants conducting a work activity specified for witness point inspection formally notify the responsible University of California technical representative (UTR) or design agent of the date and time the witness point is expected to occur. Upon notification, the UTR or the design agent conducts and documents the required witness point inspection.

## 5.0 RESPONSIBLE PERSONNEL

The following personnel are responsible for activities identified in this procedure:

- Design agent
- Inspector
- Project leader
- Quality Program project leader
- Quality specialist
- RRES-RS/ECR participants
- Subcontractor
- UTR

## 6.0 PROCEDURE

### 6.1 Prepare for Inspection and Testing

- 6.1.1 The **inspector** shall obtain an ER Document Catalog number by initiating a Document Signature form at

<http://erinternal.lanl.gov/DocCatalog/> and following the instructions provided on the form for documents that do not require peer review.

6.1.2 The **inspector** shall, as applicable, obtain an Inspection Report or Receipt Inspection Report form (see Attachments A and B) at <http://erinternal.lanl.gov/Quality/user/forms.asp>.

6.1.3 The **inspector** shall obtain and ensure the availability of current and approved acceptance/test plans, technical or performance specifications, inspection/acceptance criteria, QA/QC criteria, and acceptance and test procedures and methods for the item or service to be inspected/tested.

**Note:** Typical inspection/acceptance test methods include but are not limited to one or more of the following (see Laboratory Implementation Requirement [LIR] 308-00-04, Procurement Quality):

- Receipt inspection (described in QP-8.2, Receipt Inspection)
- Post-installation testing (described in applicable design specifications)
- Surveillance or audits of supplier (described in QPs 7.2, Supplier Evaluation and Qualification, and 10.5, Planning, Performing and Managing Surveillances)
- Source inspection (described in QP-8.2)

6.1.4 The **inspector** shall become familiar with inspection/acceptance test requirements for the item or service by reviewing the applicable inspection/acceptance test plans, specifications, criteria, and procedures (see action step 6.1.3).

6.1.5 The **inspector** and **project leader** shall perform the following actions with regard to items or services specified for witness or hold point inspection during work activities or after installation:

- The **inspector** shall notify the responsible project leader that the item or service requires a witness or hold point inspection during work activity or after installation.
- The **project leader** responsible for the item or service requiring hold or witness point inspection shall notify the UTR and design agent before or when reaching the inspection point.

- 6.1.6 **Project leaders** possessing documented, objective evidence for the necessity of bypassing a witness or hold point inspection shall contact a RRES-ECR quality specialist for assistance.
- 6.1.7 **Project leaders** and **RRES-RS/ECR participants** shall not bypass a hold or witness point inspection specified for an item or service without formal, documented authorization from the responsible UTR and design agent.
- 6.1.8 The **inspector** shall perform the following actions with regard to preparing for any inspection/acceptance testing requiring the use of measurement and test equipment (M&TE):
- The **inspector** shall obtain and train to the required M&TE.
  - The **inspector** shall verify that, in accordance with QP-5.2, Control of Measurement and Test Equipment, each required M&TE has an identifying number and valid calibration sticker.
- 6.2 Perform Inspection and Acceptance Testing
- 6.2.1 **Inspectors** shall perform the inspection/acceptance test of the item or service in accordance with the instructions, requirements, and methods described in the inspection/acceptance test plans, procedures, specifications, and criteria approved for the item or service (see action step 6.1.3).
- 6.2.2 For any item or service rejected at any point during inspection/acceptance testing, the **inspector** shall implement as applicable the requirements of QP-3.4, Corrective Action Process, QP-10.3, Stop Work and Restart, and QP-10.4, Tagout and Control of Nonconforming Items, Samples, and Products.
- 6.3 Document Inspection and Acceptance Testing
- 6.3.1 The **inspector** shall complete the Inspection Report and/or the Receipt Inspection Report form to document inspection/acceptance test results and to provide the information requested on the form.
- 6.3.2 The **inspector** shall ensure that inspection/acceptance test results are recorded on the Inspection Report and/or the Receipt Inspection Report form in accordance with the instructions, requirements, and methods described in the



inspection/acceptance test plans, procedures, specifications, and criteria approved for the item or service (see action step 6.1.3).

6.3.3 The **inspector** shall sign and date the Inspection Report or Receipt Inspection Report form.

6.3.4 If the inspector completing an Inspection Report form specifies the inspection result as Reject, the **inspector** shall perform the following actions:

- The **inspector** shall repeat the inspection/acceptance test and document the re-inspection result in the space indicated on the Inspection Report form.
- The **Inspector** shall implement as applicable the documentation requirements of QP-3.4, Corrective Action Process, QP-10.3, Stop Work and Restart, and QP-10.4, Tagout and Control of Nonconforming Items, Samples, and Products.

#### 6.4 Approve Inspection and Acceptance Testing

6.4.1 The **inspector** shall submit the Inspection Report form, the Receipt Inspection Report form, if applicable, and associated documentation to the QPPL for review.

6.4.2 The **QPPL** shall review the Inspection Report form, the Receipt Inspection Report form, if applicable, and associated documentation to evaluate the inspection/acceptance testing for approval or rejection.

6.4.3 The **QPPL** shall indicate approval or rejection of the inspection/acceptance testing by checking the Accept or Reject boxes on the Inspection Report form, as applicable, and signing and dating the form in the spaces indicated.

6.4.4 If the QPPL indicates Accept on the Inspection Report form, the **QPPL** shall return the signed form and associated documentation to the inspector for submittal to the Records Processing Facility (RPF).

6.4.5 If the QPPL indicates Reject on the Inspection Report form, the **QPPL** shall perform the following actions:

- The **QPPL** shall determine the proper course of follow-up action in accordance with the procedural documentation requirements of QP-3.4, Corrective Action Process, QP-10.3, Stop Work and Restart, and QP-10.4, Tagout and

Control of Nonconforming Items, Samples, and Products, as applicable.

- The **QPPL** shall return the signed form and associated documentation to the inspector to implement follow-up action as directed.

6.5 Before performing work described in this QP, **RRES-RS/ECR participants** should access the Department of Energy Lessons Learned Information Services home page at <http://www.tis.eh.doe.gov/II/II.html> and/or the LANL Lessons Learned Resources Web page at [http://www.lanl.gov/projects/lessons\\_learned/](http://www.lanl.gov/projects/lessons_learned/) and search for applicable lessons.

6.6 During work performance and/or after the completion of work activities, **RRES-RS/ECR participants** should identify lessons learned and document them in the LANL Lessons Learned System at [http://www.lanl.gov/projects/lessons\\_learned/](http://www.lanl.gov/projects/lessons_learned/).

## 7.0 RECORDS

The **inspector** shall submit, in accordance with QP-4.4, the following records to the RPF:

- Completed Inspection Report forms
- Completed Receipt Inspection Report forms
- Completed Document Signature forms
- Correspondence associated with the inspection/acceptance test

## 8.0 REFERENCES

To implement this QP properly, **RRES-RS/ECR participants** should become familiar with the contents of the following documents, available at [http://erinternal.lanl.gov/home\\_links/Library\\_proc.shtml](http://erinternal.lanl.gov/home_links/Library_proc.shtml):

- Quality Management Plan
- QP-2.2, Personnel Orientation and Training
- QP-3.4, Corrective Action Process
- QP-4.4, Record Transmittal to the Records Processing Facility
- QP-4.10, Document Development and Approval Process: Peer Review not Required
- QP-5.2, Control of Measurement and Test Equipment
- QP-7.2, Supplier Evaluation

- QP-8.2, Quality Assurance Source Inspection and Acceptance Testing
- QP-8.3, Qualification and Certification of Inspection and Acceptance Test Personnel
- QP-10.4, Tagout and Control of Nonconforming Items, Samples, and Products
- QP-10.3, Stop Work and Restart
- QP-10.5, Planning, Performing and Managing Surveillances

## 9.0 ATTACHMENTS

The **RRES-RS/ECR participants** using this QP may locate all forms associated with this procedure at <http://erinternal.lanl.gov/Quality/user/forms.asp>.

Attachment A: Inspection Report form (1 page)

Attachment B: Receipt Inspection Report form (1 page)

[Using a CRYPTOCARD, click here to record "self-study" training to this procedure.](#)

If you do not possess a CRYPTOCARD or encounter problems, contact the RRES-ECR training specialist.

## Attachment A, Inspection Report

Document Catalog Number: **200**\_\_-\_\_

Work Package No.: \_\_\_\_\_ Subcontractor: \_\_\_\_\_

Date of inspection: \_\_\_\_\_ Location/area: \_\_\_\_\_

Type of Inspection:

☐ Receipt ☐ Surveillance ☐ Audit ☐ Source Inspection ☐ Post-Installation Test  
☐ Other: \_\_\_\_\_

Item(s)/service(s) inspected:

Inspection criteria: (Briefly describe inspection criteria and source for criteria, e.g., test plan, procedure, design document):

M&TE used:

Inspection performed: (Provide a clear, concise, step-by-step explanation of the inspection performed):

Inspection result: ☐ Accept ☐ Reject ☐ N/A ☐ CAR issued (NDCR No. 200\_\_-\_\_)

☐ Stop work order initiated (Stop Work No.: 200\_\_-\_\_)

Inspection performed by: \_\_\_\_\_  
Printed name Signature Date

Re-inspection result: ☐ Accept ☐ Reject

Inspection performed by: \_\_\_\_\_  
Printed name Signature Date

QPPL review: ☐ Accept ☐ Reject

Reviewed by: \_\_\_\_\_  
QPPL printed name QPPL Signature Date

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**Los Alamos National Laboratory  
RRES-ECR**

## Attachment B, Receipt Inspection Report

Document Catalog Number: **200** - \_\_\_\_

|                                     |                      |
|-------------------------------------|----------------------|
| Purchase Requisition (PR) No: _____ | Date ordered: _____  |
| Ordered By: _____                   | Date received: _____ |

Receipt inspection criteria: (Inspectors: Check the criteria applicable to the item received and indicated whether the item does or does not meet the criteria by checking the Yes/Accept or No/Reject boxes as applicable.)

| Criteria:   | Yes/Accept               | No/Reject                |
|---|--------------------------|--------------------------|
| <input type="checkbox"/> Quantity, dimensions, identification, and markings of received item(s) match PR description. | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Visual inspection confirms no shipping damage.   | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Supplier documentation is complete, legible, and meets PR requirements.                      | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Certifications required by the PR are correct, complete, and authenticated.                  | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspection and test records conform to manufacturer's published data.                        | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Certificates of Calibration have traceability to NIST.                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Item marking and/or serialization is traceable to test data.                                 | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Expiration date is marked on item(s) with limited shelf life.                                | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Manufacturing nonconformances have been reported to the purchaser.                           | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Required Certified Material Test Reports are included.                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Inspect for evidence of suspect or counterfeit parts or material.                            | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Manufacturer's certificate of conformance presents, at a minimum:                            |                          |                          |
| <input type="checkbox"/> Traceability to PR requirements.   | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Codes, standards, and specifications that meet those of the PR.                              | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Any deviations from PR requirements.   | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> The name and signature of an official of the supplier organization.                          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Deliverables that are documents meet the requirements of the applicable Statement of Work    | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> All analytical samples requested are present.  | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Data for all analytical suites requested are present.  | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Required QA/QC forms and documentation are present.  | <input type="checkbox"/> | <input type="checkbox"/> |

Remarks: \_\_\_\_\_

Hold tag issued: ☐ Yes ☐ No ☐ N/A    Placed in storage ☐ Yes ☐ No ☐ N/A

Location: \_\_\_\_\_

Verification of inspection:

I verify that this receipt inspection was conducted properly and the item(s) inspected meet the requirements specified in the PR specified above.

Inspected by: \_\_\_\_\_

|              |           |      |
|--------------|-----------|------|
| Printed name | Signature | Date |
|--------------|-----------|------|

Accepted by: \_\_\_\_\_

|              |           |      |
|--------------|-----------|------|
| Printed name | Signature | Date |
|--------------|-----------|------|

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